

**WE CLAIM:**

1. A system for managing a product distribution channel having a plurality of channel participants, the method comprising:
  - one or more reference record databases;
  - one or more reference records within the reference record databases, each
  - 5 reference record providing an association between business information and spatial data for a specific channel participant;
  - transaction data related to at least one channel participant;
  - a candidate identification mechanism for accessing one or more candidate reference records using spatial and business data derived from the transaction data;
  - 10 and
  - a spatial matching mechanism for matching a subset of the candidate reference records to the transaction data.
2. The system of claim 1 wherein at least one channel participant comprises a consumer of the product who receives the product from the distribution
- 15 channel.
3. The system of claim 1 wherein at least one channel participant comprises a producer of the product who places the product in the distribution channel.
4. The system of claim 1 wherein at least one channel participant comprises a distributor of the product who receives the product from a producer and distributes the product to a consumer.
5. The system of claim 1 wherein at least one channel participant comprises a reseller such as a dealer, agent, branch, and the like.
6. The system of claim 1 wherein the candidate identification mechanism further comprises a geo-coding mechanism operable to determine street-level spatial data from the transaction data.

7. The system of claim 1 wherein the candidate identification mechanism  
5 determines postal code information from the transaction data.

8. The system of claim 1 wherein the candidate identification mechanism  
determines location information from the transaction data.

9. The system of claim 6 wherein the candidate identification mechanism  
further comprises a selection mechanism for retrieving records that have spatial data  
substantially matching the spatial data obtained from the transaction record.

10. The system of claim 9 wherein the reference record comprises:  
a reference identifier identifying the channel participant;  
a business name; and  
spatial information with predetermined accuracy.

11. The system of claim 10 wherein the predetermined accuracy is street-  
level accuracy.

12. The system of claim 10 wherein the predetermined accuracy is postal  
accuracy.

13. The system of claim 9 wherein the matching mechanism further  
comprises:

a lexical matching process operable to correlate non-spatial data in the  
transaction record with non-spatial data in the candidate reference records.

14. The system of claim 9 wherein the matching mechanism further  
comprises:

a lexical matching process operable to correlate spatial data in the transaction  
record with spatial data in the candidate reference records.

15. The system of claim 13 wherein the lexical matching process generates  
a score for each candidate reference record.

16. The system of claim 15 further comprising:

a selection process operable to select a candidate reference record based on the generated score exceeding a pre-selected threshold value, wherein the selected candidate reference record provides a precise identification of the at least one channel participant related to the transaction data.

17. The system of claim 16 wherein the selection process makes automated assignments to select candidates when the scores exceed a predetermined high threshold.

18. A system for managing a product distribution channel comprising:  
a plurality of channel participants acting as producers, consumers, and conduits for the distribution channel, wherein at least one of the plurality of participants is imprecisely identified; and  
spatial information records operable to specifically identify the at least one channel participant who is imprecisely identified.

19. A method of gathering data from a distribution channel comprising the acts of:

generating a transaction record related to a distribution channel event, the transaction record comprising transaction data identifying at least one channel participant;

geo-coding location data within the transaction data to determine a spatial identifier for the transaction record; and

accessing a reference record database using the spatial identifier to identify one or more reference records having spatial data that is similar to the spatial identifier associated with the transaction record.

20. The method of claim 19 wherein the act of accessing comprises associating the identified reference records with the transaction record.

21. The method of claim 19 wherein the reference records identify channel participants with greater precision than the transaction record.

22. The method of claim 19 wherein the reference record comprises:  
a reference identifier identifying the channel participant;

a business name; and  
spatial information with street-level accuracy.

23. The method of claim 19 wherein the reference record comprises a business database that contains spatial and/or address information.

24. The method of claim 19 wherein the business database comprises one or more databases selected from the group consisting of: InfoUSA, Dun & Bradstreet (DNB), Acxiom, Experian, Teledata, Equifax, Polk, and geographic data technologies (GDT).

25. The method of claim 19 wherein the business database comprises a non-public database maintained by or on behalf of a channel participant such as a manufacturer.

26. The method of claim 19 wherein the business database comprises one or more databases selected from the group consisting of: credit databases, business databases, state business registries, demographic databases.

27. The method of claim 19 wherein the act of geo-coding comprises determining street-level spatial data from the transaction data.

28. The method of claim 19 wherein the act of accessing the reference record database produces a plurality of candidate reference records.

29. The method of claim 28 further comprising selecting one of the candidate reference records based on matching non-spatial data between the transaction record and the candidate reference records.

30. The method of claim 29 wherein the act of selecting one of the candidate reference records is based on a score for each candidate reference record.

31. The method of claim 30 where the score comprises a complex score comprising a plurality of weighted scores and/or match quality vectors that can be evaluated by a selection algorithm.

32. The method of claim 30 wherein the act of selecting one of the  
5 candidate reference records comprises:

selecting a candidate reference record based on the generated score exceeding  
a pre-selected threshold value, wherein the selected candidate reference record  
provides a precise identification of the at least one channel participant related to the  
transaction data.

33. A method for identifying distribution channel participants comprising:  
generating a transaction record comprising data that imprecisely identifies at  
least one channel participant;

5 geo-coding location data within the transaction record to determine a spatial  
identifier for the transaction record;

providing a reference record database comprising a plurality of reference  
records where each reference record comprises business information having greater  
precision than the transaction record and each record is associated with a spatial  
identifier; and

10 identifying one or more reference records in the reference record database by  
matching the spatial identifier of the transaction record with spatial identifiers  
associated with reference records.

34. The method of claim 33 wherein the at least one channel participant is  
an end customer.

35. The method of claim 33 further comprising:

applying non-spatial matching processes to select one of the one or more  
reference records and using the selected reference record to precisely identify the at  
least one channel participant.

5 36. The method of claim 33 further comprising:

using the one or more identified referenced records to attribute transactions to  
another channel participant, wherein the transaction record itself is has insufficient  
precision to accurately attribute the transactions.

37. A method for processing distribution channel data comprising:

integrating business information with geographic data to produce integrated data, wherein the integrated data has greater resolution than the business information;

capturing distribution channel data; and

5        increasing the resolution of the distribution channel data by matching the captured data with the integrated data.

38.     A method for obtaining data about a customer's purchasing behavior through a product distribution channel comprising:

providing a product to a customer through a distribution channel, wherein the distribution channel masks at least some information about the customer;

5        creating a data store of reference records;

providing at least one reference record in the data store for the customer, the reference record containing information uniquely identifying the customer and location information associated with the customer;

10       capturing transaction data related to a transaction involving a customer purchase; and

correlating the captured transaction data with the reference record to uniquely identify the customer associated with the transaction data.

39.     In a sales environment in which a responsible sales person is associated with a product sales to a customer, a method for compensating the responsible sales person for sales through a distribution channel comprising:

providing a distribution channel that fulfils orders from the customer;

5        providing a product to a customer through the distribution channel;

creating a data store of reference records;

providing at least one reference record in the data store for the customer, the reference record containing information uniquely identifying the customer and location information associated with the customer;

10       capturing transaction data related to a transaction involving the customer's purchase;

correlating the captured transaction data with the reference record to uniquely identify the customer; and

crediting the responsible sales person based on the unique customer  
15 identification.

40. The system of claim 1 further comprising a learning database  
mechanism operable to hold records that create associations between information  
within transaction records that could not be automatically matched with reference  
records and the desired reference record so that subsequent transaction records can be  
20 matched with the desired reference records using the association provided by the  
learning database.

41. The system of claim 40 wherein the learning database is populated  
based on analysis of transaction records that require manual intervention to be  
associated with the desired reference record.